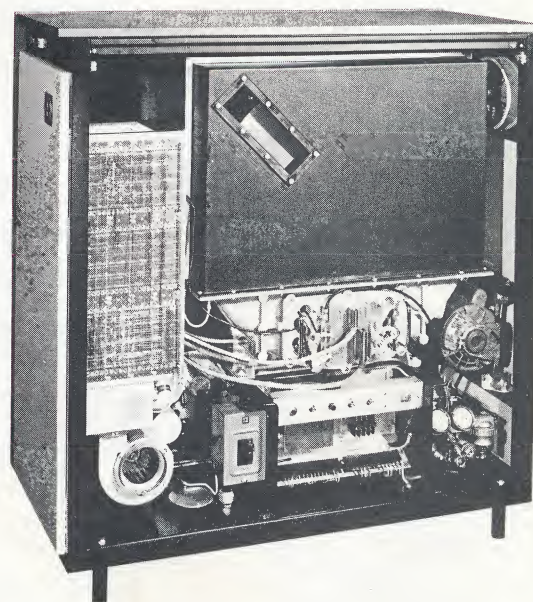




Burroughs COMPUTER COMPONENTS

TECHNICAL DATA



Model 9370
Single Disk Unit

FEATURES:

- ☐ Designed for use wherever magnetic drums have been previously employed.
- ☐ Lowest cost per bit for high-speed access applications.
- ☐ Fixed one-head-per-track construction.
- ☐ Fast average access time: 17.2 milliseconds.
- ☐ Large capacity: 16 million information bits per unit.
- ☐ Fast transfer rate: 300K bytes per second, maximum instantaneous.
- ☐ High-reliability, low-maintenance performance.
- ☐ Self-contained in one compact cabinet.
- ☐ Same field-proved construction as Burroughs multi-disk diles.

CHARACTERISTICS

SINGLE DISK UNIT, MODEL 9370-2

When used with Burroughs computer systems it is called a "Systems Memory". The same head per track design, disk, head assemblies, and construction techniques are used as in the well-known Burroughs family of 4-disk units. The Model 9370-2 is supplied complete in a single cabinet including one non-replaceable disk, fixed R/W heads, amplifier and head selection electronics, AC and DC power supplies, and air pressure system ready for interfacing to an I/O control unit.

STANDARD RECORDING FORMAT . . . other formats available by special quotation

Data Transfer: in bytes, bit-parallel, character-serial

Recording: characters are recorded bit-serial, character-serial on a single track

Recording Method: NRZ with flux-change whenever 0 changes to a 1, or 1 to a 0. Max. density is over 1400 bits per inch

Addressable Segments: fixed length consisting of one spacer byte, 100 information bytes, and one longitudinal parity check byte. Each track has 100 information segments. One maintenance segment, specially addressable, is also provided on each track

Information Tracks: 100 per disk face, 200 per unit. 8 spare tracks per unit, maximum

Clock Tracks: one Bit Clock track provides basic timing (2.4 MHz). One Address Clock track contains segment marks and addresses recorded 00-99, binary-coded decimal. A spare track for each is recorded

Capacity: 2 million information bytes per unit, (100 bytes/segment, 100 segments/track, 100 tracks/face, 2 faces/unit)

ACCESS TIMES/TRANSFER RATES

Rotation Speed: 1745 RPM, both 60 and 50 cycle

Access Time: 17.2 ms average, 34.4 ms maximum

Transfer Rates: 300K bytes/sec, max. instantaneous 291K bytes/sec, info. characters effective

POWER

Supplied with 12 ft. power cable. Specify 60 or 50 cycle operation on factory order.

60 cycle $\pm 1\%$, 115/230 or 120/208 V $\pm 10\%$, single phase, 3-wire plus ground

50 cycle $\pm 1\%$, 220 or 230 V $\pm 10\%$, 240V $+5\%$, -10% single phase, 2-wire plus ground

Power: 625 watts, compressor not running
805 watts, compressor running
0.45 power factor

OPERATING ENVIRONMENT

Designed for commercial use. Disks and heads are in sealed enclosure, with positive air pressure. Heads do not contact disk face. Entry to sealed enclosure for cleaning not required

Temperature: 60-100 degrees F, 21-38 degrees C

Humidity: 10-90% relative humidity

PHYSICAL

Height: 45" (114 cm) standard for raised floor

Width: 20" (51 cm)

Depth: 45-1/2" (115 cm)

Weight: 200 lbs. (90 kg)

Note: for installation on non-raised floor unit can be ordered with 3" high legs for cable access

Finish: standard, panels light splatter texture
front panel: light blue gray

other panels: blue

frames: black, smooth

special finishes available on quotation

INTERFACE DETAILS-SUMMARY

Signal Lines From Control Unit

Track Select (8 lines): select one of 100 tracks
binary-coded decimal representation

Disk Side Select: selects one of two disk faces

Write Information: commands a read or write

Info. Track: commands an information track or the address track for an operation

Write Lines (8 lines): designate the bits of the character to be written

Signal Lines To Control Unit

Read Levels (8 lines): designate bits of the character read from the disk

Character Clock Pulse: indicates character transfer time for both read and write

Check Character Clock Pulse: indicates transfer of a check byte

Address Clock Pulse: indicates transfer of an address character

Index Pulse: occurs once per revolution, prior to the start of a track

Unit Ready: indicates unit is operationally ready

Voltage/Current Characteristics . . . as measured at disk unit end of signal lines

<u>To Control Unit</u>	<u>Volts</u>	<u>Current Supplied</u>
False	-0.6 to +0.13	18 mA max
True	+2.1 to +2.85	45 mA max
<u>From Control Unit</u>		<u>Current Required</u>
False	-0.6 to -0.35	nil
True	+2.0 to +2.85	25 mA

Three information cables are used, each with 20 95-ohm coaxial lines. Terminations at disk unit end are 133 ohms to ground and 407 ohms to -2.0V. Rise and fall times (10-90% points) are 20 nanoseconds or less

Additional detailed information on interface, timing, and logic furnished on request

Please refer to brochure 20031, "Engineering Description of the Burroughs Disk File" for background information on general design and construction techniques applicable to all of the Burroughs family of head-per-track disk files.